Electrical Specifications

Operating Voltage: 32VDC-42VDC

Operating Current:
150mA typical w/ no outputs ON
20A maximum with all outputs ON

8 discrete inputs 36VDC = active

1 pair of external shunt inputs
0-300mV input range

1 RJ11-6 Keypad connector
(connect to 742746 Keypad using
6 conductor reversed RJ11 cable)

1 RJ11-6 Laptop connector
(connect to 742737 RS232 Adapter using
6 conductor reversed RJ11 cable)

742739 Recycle I/O Board Connector
1 9+2 pin connector

6 Relay outputs 36VDC = active
gang fused at 7.5A
Contact rating: 400,000 operations at
4A resistive load or 2A inductive load (L/R=8ms)

1 bi-directional brush actuator dual output
Solid state, current limited H-Bridge rated at
36VDC, 7.5A max. PWM speed control
optimized for actuator PN DF36-10W51-
02L01MM

Overload shutdown at 25° C :
Under 1 sec. = 9.5A   never = 7.5A

max heatsink temp - 100° C before shutdown

1 bi-directional squeegee actuator dual output
Solid state, current limited H-Bridge rated at
36VDC, 4A max. PWM soft-start
optimized for actuator PN SL36-17A8-03

Overload shutdown at 25° C:
Under 1 sec. =6.4A (7.5A)   never = 4.0A(4.75A)
(x) = with Heavy Load Jumpers Shorted

1 water pump motor output
36VDC, 4A max output - PWM speed control

Minuteman International, Inc.

3800 Rider Control Board
Revision D

Board Features

- **Fully optoisolated**

- **Current Limited Solid State Actuator Outputs**

- **Microcontroller driven**

- **Over-temp shutdown**

- **PC based adjustments and Diagnostics**

- **4kbit Non-Volatile memory**

- **Closed-Loop Brush Pressure Control with 3 settings**

- **Optional Recycle/Chemical Pump Control**

- **Isolated External Keypad Interface**

- **Watchdog timer**

Diagnostic LEDs LED2&4 Brush actuator, LED1&3 squeegee actuator operation

Green ON = operating normally

Red 1 blink pattern = Output wire shorted to +36V
resets automatically in 13 seconds

Red 2 blink pattern = Output wires shorted together
resets automatically in 13 seconds

Red 3 blink pattern = Output wire shorted to Gnd
resets automatically in 13 seconds

Red 4 blink pattern = Board Overheated
resets automatically in 13 seconds

Red On Solid, Green On Dim = actuator Overcurrent
reverse footpedal direction to reset

Red/Green Alternating Blink = board is resetting